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IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER ANWARI, MACEEH	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/753,817  
Filing Date: January 08, 2004  
Appellant(s): CHILDRESS ET AL.

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Wayne P. Bailey  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4/08/2009 appealing from the Office action  
mailed 11/14/2008.

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**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. In addition to the appellant's statement in the Appeal Brief (filed on 04/08/2009), a new ground of rejection has been rendered (in §"(9) Grounds of Rejection") below, with respect to claim 27 under 35 U.S.C. 112, second paragraph.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

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**(8) Evidence Relied Upon**

2004/0221296	Ogielski et al.	11-2004
2002/0194324	Guha	12-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 22- 24** recite the limitation "the plurality of servers". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 18- 20** are rejected under 35 U.S.C. 101 because the claims fail to place the invention squarely within one statutory class of invention. On paragraph 67 of the instant specification, applicant has provided evidence that applicant intends the "medium" to include signals. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefore not a composition of matter.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1- 4, 7, 8, 10- 14 and 21- 24** rejected under 35 U.S.C. 103(a) as being unpatentable over **Ogielski et al.** (herein after **Ogielski**) U.S. Publication No.: 2004/0221296 A1 and further in view of **Guha** U.S. publication No.: 2002/0194324 A1. Regarding **claim 1**, **Guha** discloses method in a data processing system for monitoring transactions for a set of known nodes in a network data processing system, the method comprising:

receiving cache data from a router in the data processing system, wherein the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system (**Par. 14; collecting routing messages/data and obtaining routing patterns**);

identifying the transactions handled by each node in the set of known nodes using the identification of the set of nodes included in the cache data received from the router, to form identified transactions (**Par. 14; monitoring network traffic, collecting routing messages/data**);

analyzing the identified transactions (**Par. 14; analyzing data**); and in response to the analyzing the identified transactions, selectively initiating a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the

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at least one of the nodes (**Figures 6, 9 and par. 18; dynamically balanced loads of storage centers**).

However, **Ogielski** remains silent on the specific teachings of in response to the analyzing the identified transactions, selectively initiating a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes.

In the same field of endeavor, **Guha** discloses the specific teachings of in response to the analyzing the identified transactions, selectively initiating a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes (**Figures 6, 9 and par. 18; dynamically balanced loads of storage centers**).

Accordingly it would have been obvious for one of ordinary skill in the networking art to modify or incorporate **Guha's** teachings of load balancing with the teachings of **Ogielski** to provide for a more efficient and robust system.

Regarding **claim 2**, **Ogielski-Guha** further discloses wherein the cache data is from an address resolution protocol cache located on the router (**Par. 14; collecting routing messages/data and obtaining routing patterns**).

Regarding **claim 3**, **Ogielski-Guha** further discloses wherein receiving cache data from other routers on the network data processing system (**Par. 14; collecting routing messages/data and obtaining routing patterns**).

Regarding **claim 4**, **Ogielski-Guha** further discloses wherein the receiving step occurs on a periodic basis (**par. 11; SNMP monitoring**).

Regarding **claim 7, Ogielski-Guha** further discloses wherein generating a display of the set of known nodes in a graphical view, wherein the graphical view includes the communications paths with a graphical indication of the network traffic (**Figures 3 and par. 28 & 52-57; global routing report on user interfaces**).

Regarding **claim 8, Ogielski-Guha** further discloses wherein the cache data is received through an agent located on the router (**Abstract and Par. 14; collecting routing data from a plurality of network routers**).

Regarding **claim 21, Ogielski-Guha** further discloses wherein the agent clears the address resolution protocol cache each time the cache data is sent to the data processing system (**Abstract and par. 14; network data streamed in real time, and current router data compared to previous router data**).

Regarding **claim 22, Ogielski-Guha** further discloses wherein the router receives a request from a client data processing system, where the request is then received by a network dispatcher that is interconnected to the router and a plurality of server data processing systems, where the plurality of servers appear to the client as a single server having a single network address (**Guha- Figures 6, 7, 9 and Abstract and par. 8- 9; clustered servers and requested content**).

**Claims 10-14, 17-20 and 23-24** list substantially the same elements as those stated within **claims 1-4, 7-8 and 21-22** and are therefore rejected with the same rationale and motivation as applied to **claims 1-4, 7-8 and 21-22**.

#### **NEW GROUND(S) OF REJECTION**

Claim 11 is rejected under 35 USC § 112, ¶ 2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites/recite the following means (or step) plus function limitation: analyzing means for analyzing the identified transactions.

This limitation invokes 35 USC § 112, ¶ 6 because it meets the 3-prong analysis set forth in MPEP 2181 as it recites the phrase “means for” or “step for” (or appellant identifies the limitation as a means (or step) plus function limitation in the appeal brief) and the phrase is modified by functional language and it is not modified by sufficient structure, material, or acts for performing the recited function. Also see *Altiris Inc. v. Semantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). 35 USC § 112, ¶ 6, requires such claim to be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. “If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section § 112.” *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ 1845, 1850 (Fed. Cir. 1994)(in banc.). For a computer-implemented means-plus-function claim limitation that invokes 35 USC § 112, ¶ 6, the corresponding structure is required to be more than simply a general purpose computer. *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). The corresponding structure for a computer-implemented function must include the algorithm as well as the



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general purpose computer. *WMS Gaming, Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999). The written description must at least disclose the algorithm that transforms the general purpose microprocessor to a special purpose computer programmed to perform the claimed function. *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d at 1242.

In the instant application, the following portions of the specification and drawings may appear to describe the corresponding structure for performing the claimed function:

"This analysis in step 808 may be made through various statistical processes or algorithms to determine the usage of nodes within the set of nodes. This process may identify nodes that are being under-utilized or over- utilized with respect to the particular functions being performed." (Specification page 18 particularly lines 6-11 and figure 8 element 808)

However, the specification and drawings do not disclose sufficient corresponding structure, material or acts for performing the claimed function. It appears the analyzing means is described on pages 18 and 19 of the Specification and shown as block 808 in Fig. 8 ("Analyze node usage". (Note that Fig. 9 is described as a flowchart of a process for initializing a load balancing process (Spec. 19, ll. 4-5), and not as corresponding to the claimed analyzing means.

However, the Specification does not describe how the analyzing is performed. Instead, the Specification merely discloses "This analysis in step 808 may be made through various statistical processes or algorithms to determine the usage of nodes within the set of nodes. This process may identify nodes that are being under-utilized or

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over- utilized with respect to the particular functions being performed.” (Specification page 18 lines 6-11).

Specifically, the Specification does not disclose one or more specific algorithms for the claimed means for analyzing. Therefore, Appellants have failed to adequately describe sufficient structure for performing the claimed function.

**Examiner Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.**

#### **(10) Response to Argument**

In substance the appellant argues: 1) that the rejection of **claims 22-24** under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph is in error; 2) that **claims 18- 20** comply with USPTO's guidelines regarding proper statutory subject matter; 3) that **claim 1** has been erroneously rejected and a proper prima facie showing of obviousness has not been established; 4) that **Ogielski** does not teach the receiving of cache data from a router and that the received data includes node identification information; 5) another issue regarding deficient prima facie obviousness showing that while **Guha** describes load balancing, such load balancing is performed on I/O loads at storage centers and not on nodes that are identified using cache data received from a router; 6) that **Ogielski-Guha** does not teach/suggest any type of address resolution protocol cache located on the router; 7) since **Ogielski's** figure 3 is not a proper reference in rejecting **claim 7** as its effective date does not predate the filing date of the present application; 8) that there

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is no teaching/suggestion that cache data is received through an agent located on the router; 9) that **Ogielski** does not teach or suggest the clearing of the ARP cache each time the cache data is sent to the data processing system; 10) **Ogielski-Guha** do not teach/suggest a network dispatcher that is interconnected to a router and a plurality of server data processing systems, or that a plurality of servers appear to a client on a single server having a single network address; 11 & 12) that the examiner has provided no reasoning why the rejection of such a claim is obvious.

In response to appellant's argument 1), the examiner respectfully disagrees. The claim states "the plurality of servers" without any previous mention of a plurality of servers within the instant claim or within the parent claim; therefore the examiner maintains that there is insufficient antecedent basis for this limitation in the claim.

In response to 2), the examiner respectfully disagrees. Within the appellant's specification the examiner finds evidence (i.e., par. 67) where the medium used can take the form of signals and transmission media; both of which are non-statutory subject matter (for further clarification refer to rejection above).

In response to 3), the examiner respectfully disagrees. **Ogielski** focuses on methods and systems to monitoring network routing, and more particularly to monitoring, collecting, analyzing and presenting to users network data from a plurality of network routers. Furthermore, **Ogielski** discusses the concerns relating to increased routing traffic; whereas **Guha** is concerned with end-to-end content delivery and management with quality of service enforcers that monitor and control traffic. Therefore, the examiner asserts that **Ogielski's** concerns of an monitoring and

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analyzing increasing network infrastructure/traffic provide motivation for **Guha's** load balancing in order to meet acceptable service level agreements.

In response to 4), the examiner respectfully disagrees. As discussed above **Ogielski** discloses a methods and systems to monitoring network routing, and more particularly to monitoring, collecting, analyzing and presenting to users network data from a plurality of network routers. Therefore, the examiner asserts that cache data is simply a form of stored data and all routers have stored within them routing tables (i.e., routing data) that identifies other nodes connected to the routers. Furthermore, **Ogielski** disclose the global routing infrastructure as characterized by the Internet and/or the World Wide Web (WWW) which uses the protocols TCP/IP for communicating data between nodes; and as such the IP packet headers used have within them information identifying source and destination nodes. If this wasn't the case this would pose some serious enablement concerns.

In response to 5), the examiner respectfully disagrees. The examiner asserts that as stated in response to argument 4), that cache data is simply stored data and furthermore asserts that since **Guha** discloses that load balancing (as appellant admits) is performed on I/O loads at storage centers then it still reads on this limitation. Because the claims states "load balancing process for at least one of the nodes in the set of known nodes" and a known node is simply read as, one that is identifiable/reachable by the other network components. **Ogielski-Guha** disclose just such a feature through IP headers and addresses and through the use of the BGP which designate network reachability.

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In response to 6), the examiner respectfully disagrees. The examiner asserts that address resolution protocol (ARP) is an internet standard used to find a host's hardware address when and IP or some other network layer address is known. As stated earlier **Ogielski** discloses the global routing infrastructure as characterized by the Internet and/or the World Wide Web (WWW) which uses the protocols TCP/IP for communicating data between nodes (e.g., using the Border Gateway Protocol). ARP would have to be utilized within the routers otherwise this would pose serious enablement concerns (e.g., the components would not be able to communicate/transmitted data among each other).

In response to 7), the examiner respectfully disagrees. There are various sections of **Ogielski**, that read on the limitation of **claim 7** (i.e., par. 52-57) and as such there is support found for generating a display (i.e. in the form of a report) within the provisional application which predates the present application.

In response to 8), the examiner respectfully disagrees. The term agent is very broad and as such is read as thing that acts or has the power to act and since **Ogielski** teaches the collecting of routing data from a plurality of routers than the very component doing the collecting (i.e., the agent) reads on the limitation.

In response to 9), the examiner respectfully disagrees. Routers have daemons to perform timeouts in order to remove/clear entries within their routing tables as the network infrastructure/topologies are updated.

In response to 10), the examiner respectfully disagrees. Firstly the examiner would like to point out that this claim is also rejected under 35 U.S.C. § 112, 2<sup>nd</sup>

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paragraph; secondly the examiner will like to assert that **Guha** discloses the existence of clustered servers which can act as one server.

In response to 11 & 12), the examiner has included a statement above stating that **claims 23-24** are rejected using the same reasoning/rationale and motivation applied to **claims 1-4, 7-8 and 21-22**.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the

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other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

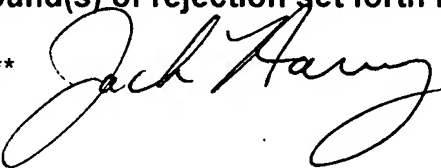
Respectfully submitted,

M.A. 05/04/2010

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444

**A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:**

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Conferees:

/William C. Vaughn, Jr./

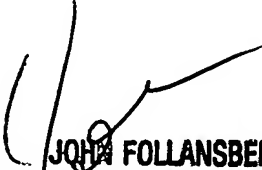
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**JOHN FOLLANSBEE**  
**SUPERVISORY PATENT EXAMINER**  
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